

THE STATUS OF LINDLEY'S *AESCULUS NEGLECTA*

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The shrubby, yellow-flowered buckeye found in the Piedmont of eastern United States has a rather long list of synonyms, but in general it is known as either *Aesculus sylvatica* Bartram or *A. neglecta* Lindley. Deciding which of these names to use has, up until now, involved the controversy over the validity of Bartram's names. In the revision of the American Hippocastanaceae (Brittonia 9:145-171, 173-195. 1957) I decided to accept *A. sylvatica* Bartr. as valid and relegate *A. neglecta* Lindl. to synonymy.

The holotype of *A. neglecta* is in the Botany School Herbarium, University of Cambridge, Cambridge, England. Lindley, in the original description (Edwards Botanical Register 12:1009. 1826), stated that the name was based on a plant purchased by the London Horticultural Society from Monsieur Catros of Bourdeaux. This tree was planted in the garden which was at Chiswick, now part of London. The specimen, labeled as the holotype, has on it "Hort. H. S. 1826" meaning Garden (Hortus) of the Horticultural Society, purchased in 1826. Also on the sheet in script is "*Aesculus neglecta* Nob., May 1826." This specimen also appears to be the one used to make the drawing for t. 1009 of the Botanical Register, which accompanies the original description. I am indebted to Dr. Peter F. Yeo, of the University Botanic Garden, Cambridge, for verifying the validity of this specimen as the holotype and bringing it to my attention in the first place.

Lindley's description fits what we know as *A. sylvatica* with the possible exception of his statements that the calyx is "clothed with black, glandular hairs" and the fact that the specimen was "a handsome hardy small tree." Since, on occasion, *A. sylvatica* is found as a small tree, and sometimes may have small stipitate glands on the calyx, these statements did not arouse very much suspicion when the description was studied. One question of its true nature did arise since Koehne (Deutsche Dendr. 386. 1893) suggested that Lindley's *A. neglecta* was a hybrid between *A. discolor* and *octandra*. Since neither the description nor the illustration indicated characteristics of *discolor* (= *pavia*) this possibility was dismissed.

A recent examination of the holotype of *A. neglecta* revealed the fact that the stipitate glands on the calyx and throughout the pedicel are long and black — a diagnostic feature of *A. octandra*. Also the general aspect of the leaf, in this holotype, approaches that of *A. octandra*. This type specimen is identical to specimens collected by me and identified as *A. octandra* X *sylvatica*, a result of natural hybridization, or introgression, between the two species. The specimen showed no characteristics of *A. pavia*.

The exact origin of this type tree is unknown, but it is possible that either the seed came from an area in Georgia or South Carolina where such hybrids frequently occur, or that the hybrid arose in a garden of Europe, an event that has occurred frequently.

Since Lindley's *A. neglecta* is based on a hybrid between *A. octandra* and *A. sylvatica*, his name must be removed from its place as a synonym of *A. sylvatica* and now be placed in synonymy under the hybrid formula along with *A. glaucescens* Sarg. (see *Rhodora* 59:193. 1957). If, on the other hand, a specific epithet is used for this hybrid, then *A. x neglecta* (pro. sp.) has priority over *A. x glaucescens* (pro. sp.). This would be especially confusing since *A. neglecta* is already well established in the literature for what we call *A. sylvatica*. I have already expressed the view (*Brittonia*, 1. c.) that formulae instead of specific epithets are better for designating the hybrids and various recombinants encountered in *Aesculus*.

The question that naturally arises at this point is whether or not William Bartram saw the true species or a hybrid form when he described *A. sylvatica*. The disturbing fact is that the areas in which he found this species are ones where hybrids between *sylvatica* and *octandra* or between *sylvatica* and *pavia* are frequently found today. The original description ("floribus ex albo et carneo eleganter variegatis, caule arboreo") is too incomplete to answer this question, and no type is known.

In Bartram's "Travels" (1791) he mentioned finding *A. sylvatica* in the Piedmont of Georgia and the Carolinas. His description, however, is based on a plant found at Ashwood, on the west side of the Cape Fear River, 5 miles northeast of

Council, in Bladen County, North Carolina. This locality is on the Coastal Plain, distinctly east of both the Piedmont and the present distribution of *A. sylvatica*. Bartram mentioned that *A. pavia* was also at Ashwood, and the more recent collections that I have seen from that area are *A. pavia*, *pavia* X *sylvatica* and *sylvatica* (X *pavia*). Many of these last hybrids very nearly approach *A. sylvatica* but have a few characteristics of *A. pavia*. There are two possibilities for the occurrence of this strong element of *A. sylvatica* in this area. First, it is entirely possible that *A. sylvatica* did extend into the Coastal Plain along the bluffs of the Cape Fear River during the time of Bartram's expeditions and has only more recently been limited to the Piedmont. Second, there is the possibility that this plant was not native in that area at all, but had been brought at an early date from the Piedmont and planted there at Ashwood by Colonel Bartram, William's uncle. If the latter is true, then this introduced plant(s) could have hybridized with the native *A. pavia* in the area which would account for the hybrids found there now. In any case, lacking evidence to the contrary, we must assume that Bartram's description was based on *A. sylvatica* and not on a hybrid form.

The British Museum has no specimen of this species collected by Bartram, and further attempts to find the type material have failed. Since, to my knowledge, no types or original material of *A. sylvatica* are in existence, I am therefore designating a *neotype*: Hardin No. 113, 22 April 1953, Union Co., South Carolina. This specimen is preserved in the Herbarium, Department of Botany, North Carolina State College.

In summary, the synonymy now must stand as follows:

1. *Aesculus sylvatica* Bartram, Travels 476. 1791.
A. neglecta of many authors, not Lindl.
2. *Aesculus octandra* X *sylvatica*
A. x neglecta Lindl. (pro. sp.), in Edwards Bot. Reg. 12:1009. 1826.
A. x glaucescens Sarg. (pro. sp.), Trees & Shrubs 2:257. 1913.

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